Name _____ Date _____

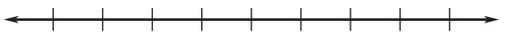
LESSON 6.3

Practice C

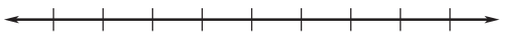
For use with pages 369–374

Solve the inequality. Graph your solution.

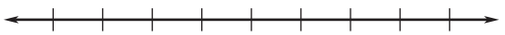
1. $4(x - 10) \geq -36$



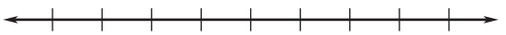
2. $3(8 - p) < 42$



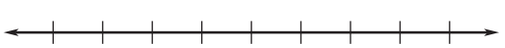
3. $-5(2 - n) \geq -30$



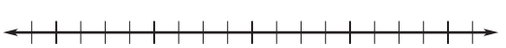
4. $10d - 9 < 15 + 4d$



5. $-8y > -2y + 24$



6. $8.5a + 6.2 \leq 3.2 - 3.5a$



7. $4 - \frac{3}{2}m \leq -6 + m$

8. $-\frac{3}{4}d - 5 < \frac{1}{4}d + 7$

Solve the inequality, if possible.

9. $4(x - 3) < 4x + 6$

10. $5(y + 1) > 5y + 8$

11. $3(4m - 2) \geq 6(2m - 1)$

12. $7(p + 3) < 4p + 21 + 3p$

13. $10 - 4c - 7 \geq 2(3 - 2c)$

14. $2.1h + 0.6 < 3(0.7h + 0.1)$

15. $5.5b - 6 + 3.5b > 3(3b - 2)$

16. $\frac{1}{6}(5x - 12) \leq \frac{5}{6}x + 2$

17. $\frac{3}{2}(6d - 4) > -3(2 - 3d)$

18. $4(2z - 1) \leq 6.2z + 5 + 4.8z$

19. $\frac{2}{3}x - 2 > 2\left(\frac{1}{3}x + 6\right)$

20. $8\left(\frac{3}{4}d + 6\right) > 6d - 25$

21. $2.4c + 8 - 8.4c < 3(2c + 4)$

22. $\frac{1}{8}(24y - 32) \leq 3y - 7$

23. $-2(3m + 1) \geq \frac{1}{2}(10 - 12m)$

24. $2(5x - 12) - 2x \leq 8x + 3$

25. $5(x - 3) \geq 2.7x - 15 + 2.3x$

26. $7(x - 4) > 9x - 4 - 2(x + 3)$

Name _____ Date _____

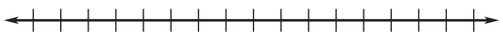
LESSON 6.3

Practice C *continued*

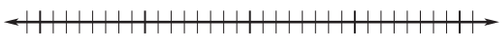
For use with pages 369–374

Translate the verbal phrase into an inequality. Then solve the inequality and graph your solution.

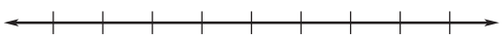
27. The sum of $4x$ and $2x$ is less than the difference of $5x$ and 13.



28. The product of 3 and the sum of $2x$ and 1 is greater than or equal to the product of -2 and the sum of 3 and x.

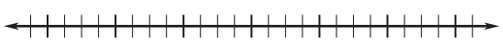


29. The product of 2 and the difference of 5 and x is less than or equal to the sum of $5x$ and $3x$.



30. The difference of 32 and $4x$ is less than or equal to the product of -4 and the difference of -8 and x.

31. The product of 3 and the difference of 2 and $4x$ is less than or equal to the sum of $5x$ and $7x$.



32. **Daffodils** The charity that you volunteer for is selling potted daffodils in the spring to raise money. The charity has spent \$250 on supplies and plans to sell them for \$5 each.

a. Write an inequality that gives the possible numbers d of daffodils the charity needs to sell in order for the profit to be positive.

b. What are the possible numbers of daffodils the charity needs to sell in order for the profit to be positive?

c. If the charity bought 55 daffodil bulbs, are they able to make a profit? *Explain.*

33. **Computer** You are planning on a buying a computer, but you don't want to spend over \$1000 on the computer. You have a coupon for \$50 off the purchase of any item at the store you want to buy the computer from.

a. If the sales tax is 6%, write an expression for the amount of tax on the price p of a computer in dollars after the coupon is applied.

b. Write and solve an inequality that gives the possible amounts you are willing to pay for the computer.